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67,097-844; 11143

IN THE CLAIMS

1. (Currently Amended) A deoiler capable of communicating with a source of air contaminated with oil, comprising:

at least one separator for separating the oil from the air; and

a source of suction including a compressor for compressing air, said compressor including a rotor, and a casing surrounding said rotor for reducing pressure at the source of the contaminated air.

2. (Original) The deoiler of claim 1 wherein the deoiler crates the suction when operating at a first operating condition and acts as a restrictor when operating at a second operating condition.

3. (Original) The deoiler of claim 2 wherein the first operating condition is a lower range of speeds and the second operating condition is a higher range of speeds.

4. (Cancelled)

5. (Currently Amended) The deoiler of claim 1 ~~claim 4~~ wherein the compressor includes an inlet, a stage of compressor blades and an outlet, and the separator comprises at least one of:

i) a compressor inlet oil separator including a collection surface and a recovery passage at the compressor inlet; and

ii) a compressor outlet oil separator including a collection surface and a recovery passage at the compressor outlet.

6. (Original) The deoiler of claim 5, comprising:

a plenum for receiving air discharged from the compressor, the plenum bounded in part by a plenum seal;

wherein the inlet oil separator comprises a set of teeth; and

wherein the compressor outlet recovery passage extends past the plenum seal.

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7. (Original) The deoiler of claim 5 comprising an auxiliary separator.
8. (Original) The deoiler of claim 7 wherein the auxiliary separator includes a set of paddles.
9. (Original) The deoiler of claim 7 wherein the auxiliary separator resides upstream of the oil collection surfaces at the compressor inlet and outlet.
10. (Currently Amended) A deoiler capable of communicating with a source of air contaminated with oil, comprising:  
at least one separator for separating the oil from the air;  
a source of suction for reducing pressure at the source of the contaminated air;  
a compressor for recompressing the air; and  
~~The deoiler of claim 4 comprising a stator stage downstream of the compressor for capturing decontaminated air.~~
11. (Original) The deoiler of claim 10 wherein the stator stage includes an array of stator vanes separated by intervene passages each having an inlet and an outlet, each passage increasing in area from its inlet to its outlet.
12. (Original) The deoiler of claim 10 wherein the stator stage includes an array of stator vanes separated by intervene passages each having an inlet, an outlet and a meanline, each meanline forming a nonzero angle with respect to a radial line that intersects the meanline at the passage inlet.
13. (Original) The deoiler of claim 12 wherein the nonzero angle is about 70 degrees.
14. (Original) The deoiler of claim 1 wherein the air source is a bearing compartment.
- 15.-16. (Cancelled)

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17. (Original) A deoiler for separating oil from air contaminated with the oil, comprising:

- an intake for admitting the air to the deoiler;
- a first separator comprising a paddlewheel and a deoiler outlet;
- a compressor for receiving the air from the first separator, the compressor comprising a compressor inlet, a stage of blades and a compressor outlet;
- a second separator comprising an array of teeth and an oil recovery passage at the compressor inlet;
- a plenum for receiving air discharged from the compressor outlet, the plenum bounded in part by a plenum seal;
- a third separator comprising an oil collection surface and an oil recovery passage that extends past the plenum seal; and
- a stator stage downstream of the plenum for receiving decontaminated air from the plenum, the stator stage comprising an array of stator vanes separated by intervene passages each having an inlet, an outlet and a meanline, each meanline forming a nonzero angle with respect to a radial line that intersects the meanline at the passage inlet, and each passage increasing in area from its inlet to its outlet.

18. (Cancelled)

19. (New) A compartment comprising:

- a shaft and a plurality of spaced bearings, and a seal positioned outwardly of each said bearing;
- a source of pressurized air directed at outer faces of said seals such that a pressurized air source is directed into the compartment between the seals;
- a source of lubricant to be directed into said compartment; and
- a deoiler connected to said compartment at a connection, and operable for separating oil from air, and the deoiler creating a suction at the connection to draw air and entrained oil to the deoiler for separation.

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20. (New) The compartment as set forth in claim 19 wherein said deoiler includes a compressor having a rotor and a casing closely surrounding said rotor to create the suction at the inlet.